PLANTING GUIDE

Andropogon gerardii Vitman

Common Names

big bluestem turkey foot

Accession Numbers/Releases:

9068615 Zone – 2, Central Iowa Germplasm 9068616 Zone – 3, Southern Iowa Germplasm

Description:

Big bluestem is a tall, warm-season perennial native grass with stiff, erect culms; flattened and keeled sheaths; membranous ligules; and flat or folded leaf blades. Big bluestem has developed a very efficient spreading root system which may reach depths of 5-8 feet (150-200 cm) or more in the northern latitudes, and 6-8 feet (180-240 cm) in the southern part of its natural range. Although short rhizomes may be present, it usually makes a bunch type growth. It is usually associated with one or more of the other three dominant tall grass prairie species: indiangrass, Sorghastrum nutans (L.) Nash; switchgrass, Panicum virgatum L.; and eastern gamagrass, Tripsacum dactyloides L. Big bluestem occurs on subirrigated lowlands, nearly level to gently undulating glacial till plains, overflow sites, level swales and depressions, residual and glacial uplands, and stream terraces and bottomlands along rivers and tributaries. The abundant, leafy forage is palatable to all classes of livestock.

Manual of the Grasses of the United States
A. S. Hitchcock

Native Plants
Warm Season
Grasses, Flowers
and Legumes

Purpose: Big bluestem can be used in the following situations: roadside plantings, range seedings, pasture seedings, prairie restoration, prairie landscaping and wildlife cover.

Source: Seed of these accessions, 9068615 and 9068616, were collected from native stands located in the central (Zone 2) and southern (Zone 3) counties respectively of the state of Iowa.

Establishment: Prepare a clean weed-free seedbed by disking and harrowing. Firm the seedbed by cultipacking. Seedbed should be firm enough to allow the seed to be planted 1/4 inch deep. Big bluestem can also be no-tilled into sod or crop stubble using appropriate no till equipment and chemical programs. Planting can be made using a grass drill with a seedbox designed for fluffy seed. A Brillion seeder works well in the seeding operation, although other types of seeders or drills may be used provided debearded seed is used.

Big bluestem grows well on deep to shallow, sandy to fine-textured and rocky soils. Seed can be planted in the spring or a dormant seeding can be made in the fall or winter. The seedlings are vigorous; therefore, new plantings can be established quickly. It is ordinarily ready for harvest from September in the South to October in the northern part of the Midwest region.

Plants are cross-pollinated, so for seed production, to prevent crossing, plant 900 to 1,000 feet from other varieties or accessions.

Fertilizer: Apply no fertilizer the establishment year unless soil test indicates a severe deficiency of potassium and/or phosphorus. Use no nitrogen during the establishment year as this can encourage weed competition.

Seeding Rates: Seeding rates for big bluestem should be about 7-10 pounds of pure live seed (PLS) per acre for pasture planting. There are approximately 165,000 clean seeds in one pound of undebearded big bluestem and 190,000 clean seed in one pound of debearded seed. Big bluestem is a major component of a range mix, so seeding rate varies depending on percent desired in the stand.

Seeding Dates: Spring (May to June) or a fall dormant seeding (November to March).

Management: Reduce weed competition by mowing at a height that will not affect the big bluestem seedlings during the establishment year or use recommended pesticides for this species and follow the label recommendation. NOTE: SOME HERBICIDE PRODUCTS MAY NOT BE REGISTERED ON THIS GRASS SPECIES IN YOUR STATE OR PROVINCE.

4/24/00

References

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The Prairie Garden, 70 Native Plants You Can Grow in Town or County; pp. 176-177, Smith, J. Robert and Smith, Beatrice S., University of Wisconsin Press, Madison, Wisconsin 1980.

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Flora of Missouri; p. 246; Steyermark, Julian A., Iowa State University Press, Ames, Iowa 1963.

Grass Yearbook of Agriculture, pp. 651-653; United States Department of Agriculture; U.S. Government Printing Office, Washington, DC 1948.

The Grasses of Missouri; pp. 211, 213-214; Kucera, L. Clair, University of Missouri Press, Columbia, MO 1961.

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